



# ***Offshore Aquaculture: Building on Policy, Technology & Research***

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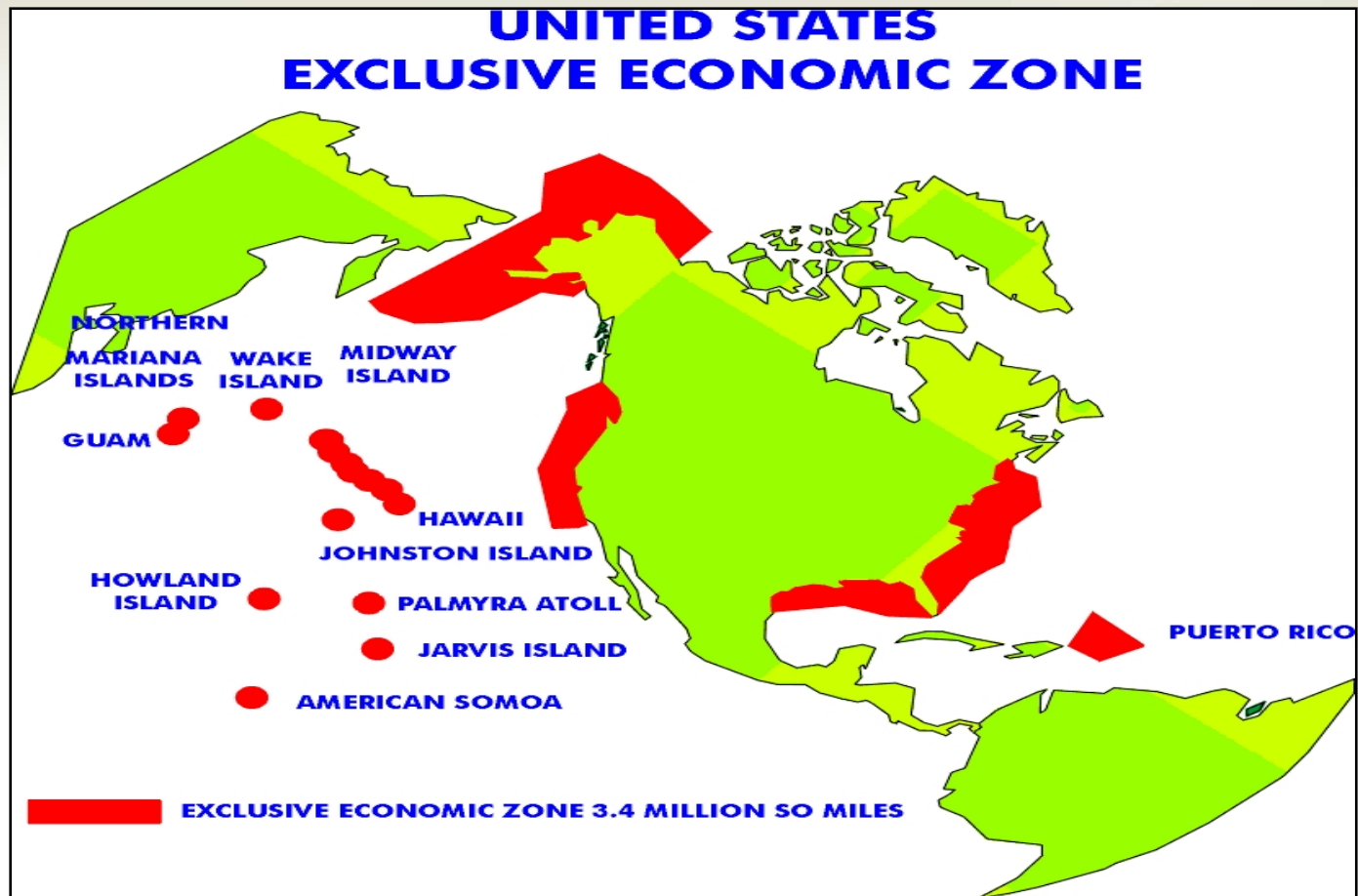
# Before We Begin ...

*“In his exploitation of the sea man is still a barbarian – a ruthless hunter slaughtering whole species of animals without heeding the consequences. With earth’s burgeoning human population to feed we must turn to the sea with new understanding and new technology. We need to farm it as we farm the land.”*

*Dr. Jacques Cousteau, 1973*



# Millions of Square Miles

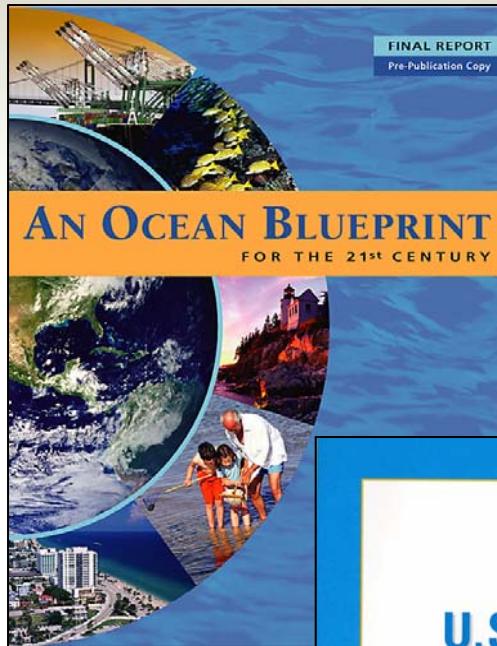


# Why Momentum Now?

- **Growing Global Demand for Seafood**
- **Economic Opportunity**
- **Seafood and Health**
- **Lack of Availability of Coastal Areas**
- **Environmental Quality**
- **New Species, Technology**
- **High-Level Attention**

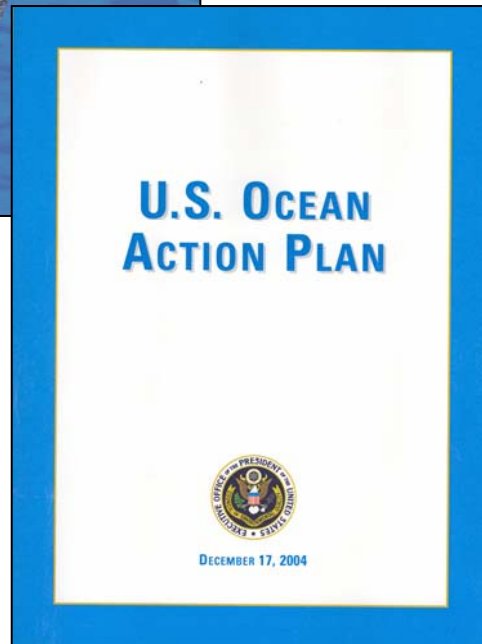


# Aquaculture Gets Attention



## U.S. Commission on Ocean Policy

NOAA should expand marine aquaculture research, development, training, extension, and technology transfer ... set priorities for research and technology



## President's Ocean Action Plan

U.S. Ocean Action Plan, made a commitment to transmit to the 109th Congress legislation to establish a regulatory structure for offshore aquaculture





# ***U.S. Secretary of Commerce Gutierrez Statement***

**“I am convinced that the United States must explore the potential of offshore aquaculture to help meet the growing demand for seafood in this country and to create jobs and economic opportunity for coastal communities.**

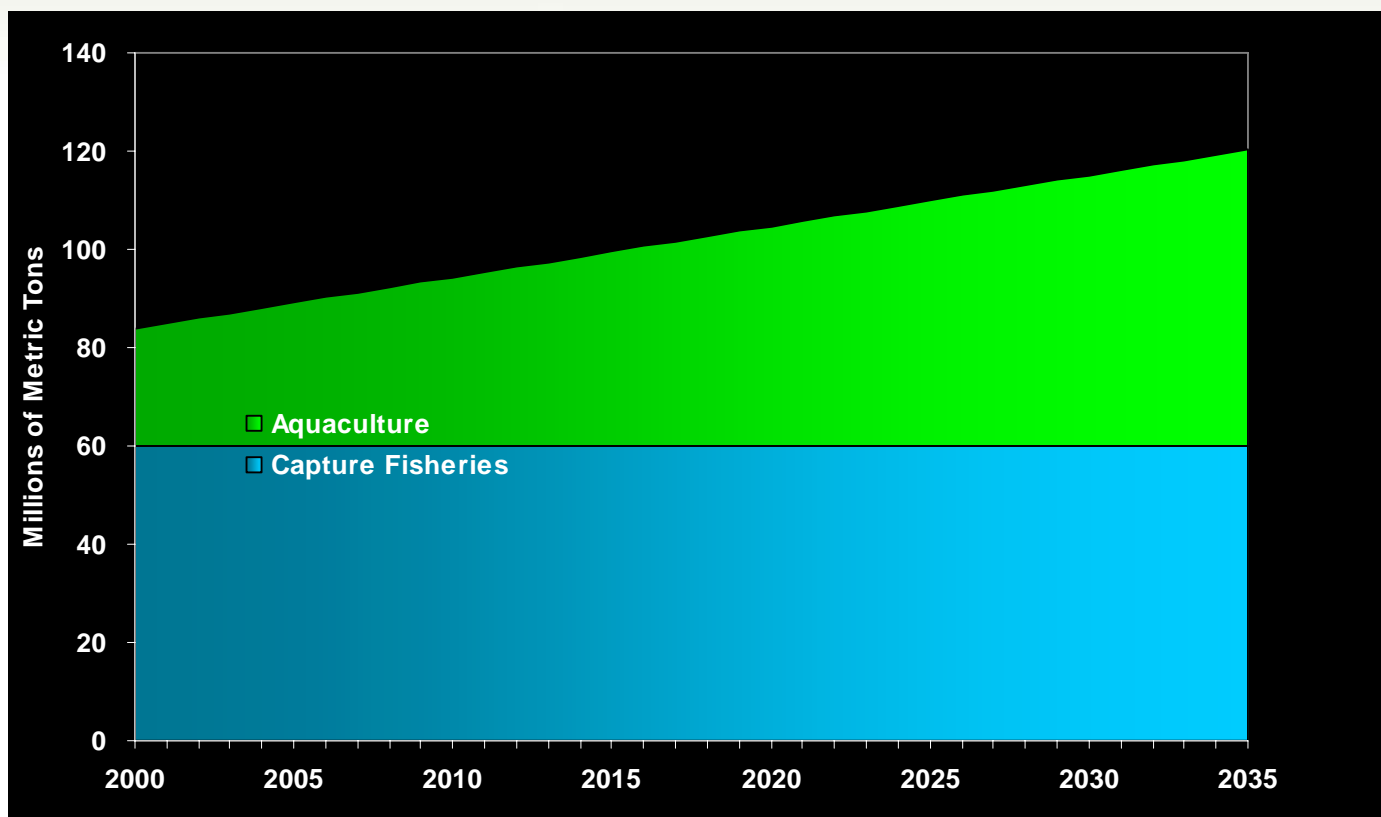
**To support that, we are making the *National Offshore Aquaculture Act of 2005* a priority for this department and this country.  
We need to create this opportunity now.”**



***February 13, 2006***



# Where Will Our Seafood Come From?

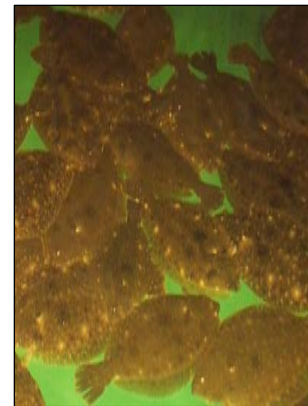


# Where Will Our Seafood Come From?

## With increasing demand for seafood:

- U.S. aquaculture production: 500,000 mt (whole weight)
- U.S. wild catch 3million mt (half exported, ~ 22% U.S. mkt)
- Current U.S. consumption: 6 to 7 m mt (70% imported)
- 2025 gap: 2million mt minimum (\$5 billion, 150,000 jobs)

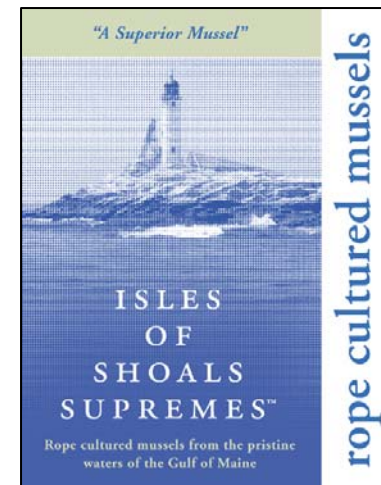
***Our choice: Imports or domestic aquaculture?***





# Coastal Communities: Seafood Supply and Jobs

- Seafood industry needs aquaculture
- Integration of fishing and aquaculture
- Coastal jobs, economic opportunity



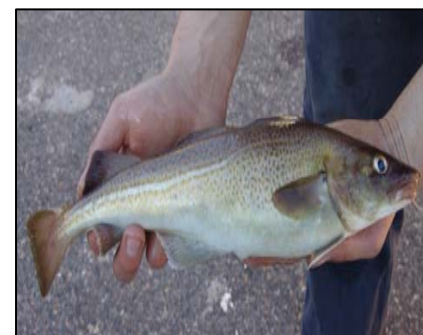
# Challenges to Aquaculture

- U.S. laws are confusing or non-existent ~ **We need a better regulatory framework**
- Divergent views ~ **We need to build political will**
- Lack of understanding about health/safety, environmental and economic effects ~ **Public needs accurate information**
- **Need infrastructure, R&D**



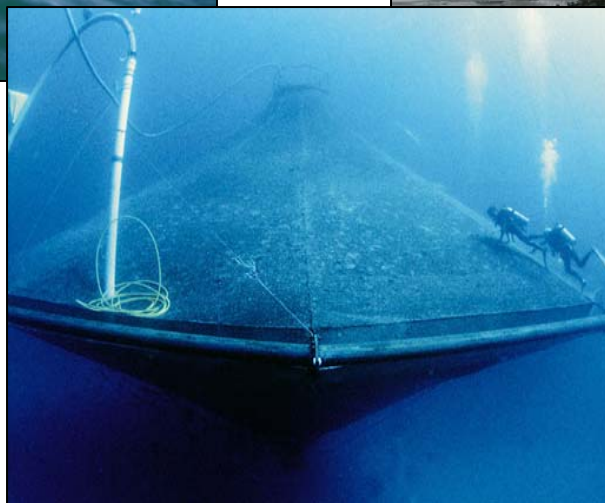
# Regulatory Policy Framework

- Enabling: license to operate
- Stewardship: protect the environment and safeguard wild stocks
- Balance multiple uses
- Dynamic: learn by doing
- Responsive to stakeholders





# Frontier of Technology



# Better Understanding

- Environmental benefits and risks
- Ecosystem management
- Stock enhancement, commercial aquaculture, and fishing
- Feed sources
- Socioeconomics





# Next Steps: Learning by Doing

- Build partnerships
- Secure funding, investment
- Work with coastal communities, industry, scientists, NGOs, and others to build the industry
- Broadcast results, successes
- Adjust and adapt



# **To Find Out More ...**

**[www.aquaculture.noaa.gov](http://www.aquaculture.noaa.gov)**

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